

FEB 20 1947

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THE CHURCH IN AN ATOMIC AGE

By Edwin L. Jones



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By EDWIN L. JONES —

Mr. Edwin L. Jones, of the J. A. Jones Construction Company, is an active Christian layman and contractor of Charlotte, North Carolina. As the builder of a large section of the Manhattan Project plant at Oak Ridge, Tennessee, he was from the beginning deeply involved in the production of the Atomic bomb. As a government observer, he witnessed the test of the bomb on a naval concentration in Bikini Atoll in July, 1946. This booklet contains the substance of an address made by Mr. Jones at Lake Junaluska, North Carolina, a few days after his return from Bikini.

During the past few years I have been in the thick of our country's herculean efforts to harness nuclear energy for military purposes. Like many persons, I am tired of hearing every public speaker, radio voice, and newspaper editor drag in allusions to the Atomic bomb, and fit it into the arguments they are presenting.

But the Atomic bomb is here. It is no longer a theory, but a fact. Our country has a supply of them, and it is a

matter of public knowledge that we are still manufacturing the materials. The process is like Pandora's box, which, once opened, could not again be closed, no matter what pestilence issued forth.

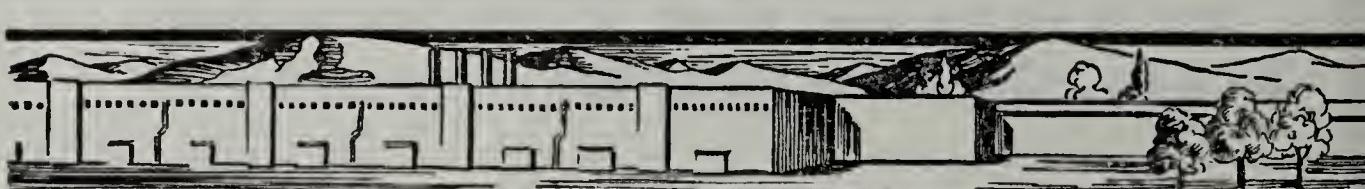
Perhaps we have bitten into the apple from the tree of knowledge before the apple was ready to be eaten—or we to eat it—and therefore we are suffering and will suffer from "atomic ache."

The Challenge

We must think more constructively and intensely about this matter of Atomic energy, and we must do something about it. President Truman has said truly, "The release of Atomic energy constitutes a new force far too revolutionary to consider in the framework of old ideas."

The Atomic Age is here, and nothing remains for the human race but to adjust its total life to an entirely new set of forces. It is impossible to turn back now. Dr. Arthur H. Compton, who won the Nobel prize for cosmic ray research and who directed the experiments in the "plutonium method," has declared:

"It was inevitable that mankind should have Atomic fire. The worldwide growth of science and technology is the main line of the rapid evolution of man into a social being whose community is the world. The release of



Atomic energy is but a dramatic step in this evolution. It is a part of our age-old quest to use the forces of nature for shaping the world according to our ideas.

"No group of men had the power to prevent the coming of the Atomic Age. It is doubtful whether the world has faced a more critical problem than that of the proper handling of Atomic energy."

The problem simply resolves itself into this: We have released a force which may destroy man and all his works in the twinkling of an eye. Can we control it, use it for our moral purposes, and make it further our peaceful and progressive civilization? Or will we fail to utilize the force we have unloosed for the human good and allow it eventually to blast this race from God's universe?

Development of Nuclear Energy

In 1939 and 1940, nuclear scientists, the world over, became excited over the significant possibilities inherent in the theory of the equivalence of mass energy. They knew that the nucleus of some of the uranium atoms could be split, and that this was accompanied by the release of relatively enormous amounts of energy. It was known that the fission of uranium could be initiated by neutrons coming from outside the atom, and that the fission itself would produce additional neutrons.

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Theoretically, this meant that it might be possible, by a multiplying chain reaction, to develop tremendous explosive forces. It was also known that the Axis powers were desperately seeking ways for the large scale production of this material.

In June, 1942, Dr. Bush, Director O.S.R.D., sent a report to the President. It stated that an explosion equal to thousands of tons of T.N.T. might be caused to occur; that the desired material might be produced by any one of four different methods; and that no one of these methods was superior, theoretically, to the other. He recommended that the Army Engineers be assigned the task of producing nuclear energy.

As a result of that recommendation, and with the full knowledge and technical help of Canada and Great Britain, a race against time was begun. Over two billion dollars were spent. Total secrecy was attained. Laboratory work and pilot plants were jumped over and production plants were erected to do a job that no one—of a certainty—could predict could be done.

In its early stages the whole project was one vast network of disappointments and blind alleys. Until February, 1945, everyone connected with the matter was defeated and ready to give up. Then almost as by a miracle the

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process plants began to function and U235 was produced in appreciable quantities.

Then things happened quickly.

The Chronology

From early February to July 16, the problem was to find out how to use this Atomic energy. And the first bomb was exploded at Los Alamos, New Mexico—more successfully than anyone had dared to hope.

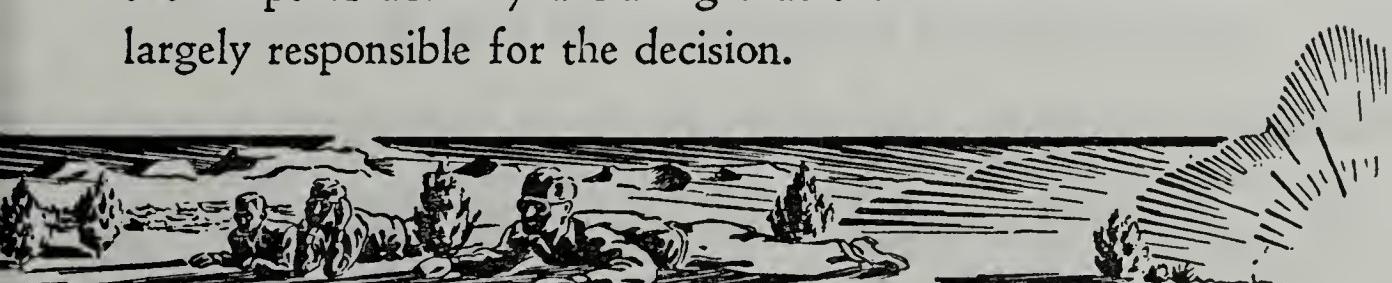
On JULY 26, 1945, our rulers from Potsdam warned Japan that unless she surrendered, she would be bombed out of existence.

On JULY 29, 1945, the Japanese Premier Suzuki scorned the Allied Potsdam surrender ultimatum as "unworthy of official notice."

On AUGUST 6, 1945, just three weeks after the initial test in New Mexico, an Atomic bomb dropped on Hiroshima.

On AUGUST 9, 1945, Nagasaki was hit by the second Atomic bomb.

On AUGUST 10, 1945, the Japanese government said it was ready to accept the terms of the Potsdam ultimatum, the Emperor actually declaring that the Atomic bomb was largely responsible for the decision.



On AUGUST 14, 1945, Japan surrendered.

In four days the attitude of our enemy changed from an arrogance that refused to take notice of an ultimatum to an unconditional acceptance of that ultimatum. During those four days only two bombs fell.

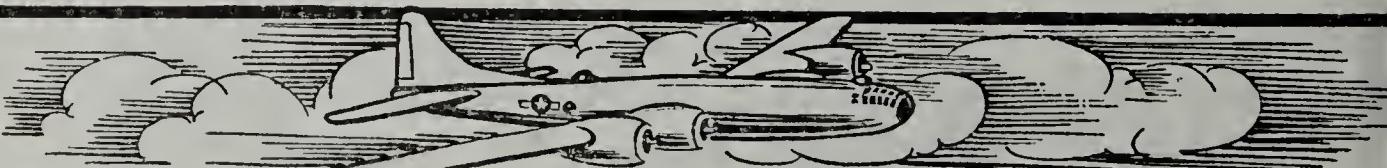
That swift chronological chain of historical events shows that our scientists, our industry, our workmen, our government, and our military leaders all worked together as a team, without sparing expense, to use for the quick ending of World War II, the power that has been always locked up in the atom. It was found, and it was used. Atomic energy was not produced and then locked up as a scientific curiosity. We unlocked the secret of nature and we used it, as always, for destructive purposes.

For Destruction

It is a sobering fact that we have always used our inventions and discoveries for purposes of destruction.

We used penicillin and the "sulfa drugs" to heal the bodies of men, so that those bodies could again be thrown into battle. We even refused some of these drugs to civilian sufferers while we were using it in the war.

Airplanes, radar, electronic devices, all good in themselves, were used as instruments of death to our enemies.



Radio and the printed page were utilized to deceive our foe and undermine his morale.

We invent, we explore, we learn, we develop—but nowhere and at no time have we put checks and safeguards on our new-found knowledge to prevent its use for mass murder. Our moral sense has not kept pace with our technical skill. Our scientific devices have all been used to enable us to kill our fellowmen more quickly and in larger numbers.

Will this black history repeat itself? Will nuclear energy be used exclusively or mainly for purposes of war and human destruction?

At the present moment all the facts point in that direction. Thus far the total attention given to the Atomic discovery concerns its use in all-out war, and every nation is alert to determine how it may be secured for possible use against every other nation.

In that direction lies the total wreckage of all that man has built up across the centuries. No men know this more surely than the very men who are planning so to use Atomic power, yet they seem impotent to find better uses for that power.

The pressing question of the day is, How can we have *One World*, in which peace prevails and man's discoveries

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are used exclusively for man's good? How can all hates and jealousies and animosities be set aside, so that nations will go to war no more?

The Atomic Age demands an answer.

The Nature of the Atom

What is an Atom?

Atoms are the building blocks of God.

God in His wisdom made nature as simple as A, B, C's. So far as we know, He put less than a hundred elements in the world. Everything we have is made up of the Atoms of those elements. For example, 2 H atoms plus 1 O atom is water, and it stays water under all normal conditions.

To further simplify nature, God made the Atom of only three known materials: (1) a nucleus or center, called the proton, which has mass and a positive charge; (2) the electron, which has practically no mass and has a negative charge, and revolves around the proton as the earth around the sun; and (3) the neutron, which has mass and no charge; the neutron does not change the character of an Atom—but its weight. Add a proton to a hydrogen Atom, for example, and it is changed to an Atom of helium.

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The electron, proton, and neutron are so small that, relatively speaking, the distances separating them in an Atom are astronomical distances. Therefore, the energy that holds the Atom together is the energy of the universe; the energy wrapped up in the Atom is the energy of the universe.

It has been measured. Einstein's equation is that $E=MC^2$ —or that 1 pound of matter has the same energy as 1,500,000 tons of coal.

When we break apart the Atom, and use the energy wrapped up by God in that Atom, never again can we use that Atom for anything else. We have completely, entirely, and *for the first time since creation*, destroyed beyond redemption and recall that much of the very nature of the universe itself.

In all past millenniums matter has been deemed indestructible. Man could cut, crush, melt, and burn it, but he destroyed nothing. He only changed matter from one form to another form. Nothing was actually eliminated from the universe. The sum total of matter in existence remained constant.

Now he completely and irrevocably destroys something.
The actual destruction of our world has begun.

That is why this subject is so important.



The Answer

In 1945 we discovered Atomic energy and used it destructively.

In 1947 we have nuclear energy and the means to produce it, and do not know what to do with it.

A recent cartoon showed a long table, bare except for an Atomic bomb in the center. Around the table were heads of government, military leaders, scientists. All were silent and deeply worried. Only the bomb spoke, and it said, "Don't you know that I can't explode unless one of you sets me off?"

Now suppose one man in that group, or one set of men, becomes mad for universal power and sets off that bomb!

We must be sure that those men, those heads of government who have the responsibility for decisions to control the bomb—are Christian men, with a deep sense of their responsibility to their God and their brothers. *That not one of them will want to set off that bomb!*

A Greater Power

We have another power, greater and stronger than nuclear energy or the Atomic bomb. We've had that power for 2000 years. We've had Atomic power for a year, and we've already used it to destroy.



We've had the power of Life for 2000 years, and we've been afraid to use it. I mean the spiritual power as revealed to the world by Jesus Christ.

The Gospel of Jesus Christ is also a part of the nature of the universe. It is more powerful than nuclear energy. It can do things that the Atomic bomb cannot do. It can restrain men from setting off the bomb.

And that must be done if the race is to survive. The first, and therefore the crudest and least developed bomb, could destroy an entire city and kill one hundred thousand people. What can the bomb of the future do?

Think of the 1917 automobile or airplane! If the science of bomb making progresses in thirty years as the science of motor transportation has developed in the past thirty years, what will the Atomic bomb, 1977 model, be capable of doing to the world?

Atomic power is the utter destruction of the material. The power of Christ is the power of life. "All power is given unto me in heaven and on earth." Spiritual power is stronger.

We Must Use It

This spiritual power resident in Christ and the Gospel, rightly used—not dormant—is the only force that can

save us from complete and perhaps almost immediate Atomic destruction. What fools we will be if we do not use it!

We haven't used Christ's power because we've been afraid of it, and of what it will do to us. It will make us practice the Golden Rule. It will cause us to follow in His steps. It might take some of the luxury and glitter away from our daily living.

Actually we know that the spiritual power given and revealed to us 2000 years ago by Christ will make us new men, and will change our hearts enough so that war would be impossible. This power is demonstrated fact—demonstrated in multitudes of lives across the centuries. It is as real as the bomb itself—and can no more be denied.

General Leslie R. Groves declared that "the real problem is not to outlaw the Atomic bomb, but to outlaw war." But war will never be outlawed until and unless the Prince of Peace is really reigning. The job before us, the urgent, imperative job—the difference between life and death—is to become changed men through the spiritual power of Christ, and to be thoroughly in earnest that others are spiritualized also.

Knowing that, what are we going to do about it? The change must come to us personally—in our home—in our

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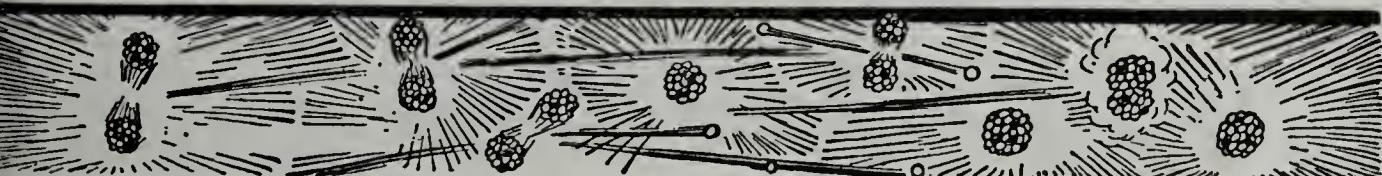
business—in our country—in our world. It is not a question of capitalism versus communism; democracy versus fascism; labor versus management; but of the power of darkness and annihilation versus the power of Christ and everlasting life.

Is it necessary that the present generation be destroyed because of our unbelief, and for our sins? We've had warnings, and we've had opportunities. It is none too soon for us to begin to set our hearts on spiritual values, and to devalue the material world that has been our idol.

Of one thing I'm certain: there is only one value, even in this scientific age, that can make life and living worth while—and that one thing is spiritual value. Regardless of how much men know and how much they will learn—sin and selfishness and greed will inevitably wreck their lives unless Christ's power can come in and cleanse, and pardon, and save.

Work Quickly

Purposely, I gave you, date by date, the swift chronology of events from February 23, 1945, until August 6, 1945 (less than one-half year), during which the whole energy and force of our combined scientific, industrial, political and military might swept on irresistibly and inevitably



from first production of nuclear energy to the first Atomic bomb on Hiroshima.

Suppose all our might and numbers and resources were just as seriously and in just such earnestness marshalled under the banner of Christ in a spiritual attack on the forces of evil. We'd outlaw war forever, in less time than it took to drop the first Atomic bomb.

One of our statesmen, returned from the U.N. conference in London, is credited with the facetious remark that the U.N. has only 236 problems: U235 and Soviet Russia.

We do not have 236 problems or 236 choices. We have only one problem and one choice. It's either *One World* or none. It's either the universal Brotherhood of Man through Christ, or it's annihilation through the utter destruction of our material world by the power we have but will not control.

We have had the ultimate in spiritual power for twenty centuries; we now have the ultimate in material power. One creates life; one destroys! Which will we use?

Missionary Task

I have said that we must have *one* world. I mentioned the *universal* Brotherhood of Man. These qualifying words



are to be emphasized, for they are all-important. The utilization of the Power of Christ must embrace the *whole world*, must include *all* men.

Any *one* nation can use Atomic power to destroy. A small group of men—or even *one* man like Hitler—can set off the forces of destruction. There can, therefore, be no hope or safety until *all* nations and *all* men walk in the ways of Christ.

This means what we have always called Christian Missions, the evangelization of the whole world. A few years ago our Student Volunteer Movement had a slogan: "The Evangelization of the World in This Generation." It was a noble phrase, but it remained a phrase; it was never carried out.

It must be carried out now.

WORLD OUTLOOK has printed a dozen pages of pictures made by its correspondent in the cities where the bombs fell. They were awful scenes of total destruction. No person who saw those pictures will ever forget them.

The Atomic bombs were produced and used in less than six months. When so much destruction can transpire in so short a time, a generation seems a very long period in which to win the world for an opposite philosophy. What may come to pass in this suffering world in the meantime?

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If there was ever a time when the evangelization of the world could be regarded only as a religious movement on the part of some benevolent people to spread spiritual blessings among the "heathen," that time has forever passed. The missionary enterprise has become an all-important phase of the high strategy of civilization. In an Atomic Age there can be no pagan areas of either geography or life.

Around the council table of the nations, in the center of which is the Atomic bomb, there must be no land whose people serve non-Christian gods—none whose multitudes are so economically dispossessed that their very hunger creates a tinder-box of danger—none in which 80 or 90 per cent illiteracy makes democracy impossible and autocracy inevitable. All must be Christian—all must have the benefits of a Christian society.

That is the answer to the problem posed by the Atomic bomb.

That is the only course of sanity and safety in the Atomic Age.

The greater Power of Christ's Spirit must be released, and it must spread until it controls all men and all lands. That Power alone is greater than nuclear energy. It alone can turn Atomic power into channels of usefulness and service.

There is no time to lose.

"The Church In An Atomic Age," by Mr. Edwin L. Jones, has been published as a public service for the ministers and laymen of all the churches by

WORLD OUTLOOK

**A colorful and profusely illustrated Home Journal
of World Christianity.**

150 Fifth Avenue

New York 11, N. Y.

